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SLANTS & TRENDS

SMALL BUSINESS ADMINISTRATOR Thomas S. Kleppe will be named to replace former Wyoming Gov. Stanley K. Hathaway as Secretary of Interior, according to Sens. William R. Young (R.-N.D.) and Quentin N. Burdick (D.-N.D.). Reports of the former North Dakota congressman's nomination immediately drew fire from Rep. Morris Udall (D.-Ariz.) who charged that Kleppe "has never demonstrated expertise in sensitive areas of the environment and resource conservation that head the list of the Secretary's duties." Udall suggested President Ford appoint either EPA Administrator Russell E. Train, or former Administrator William D. Ruckelshaus.

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LEGISLATION TO PERMIT THE Secretary of Agriculture to veto any action taken by Environmental Protection Agency to prohibit the use of certain pesticides was defeated last week by the House Agriculture Committee (A/WPR, Aug. 4, 1975, p. 302). Instead, the committee adopted a compromise proposal by Rep. Joseph P. Vigorito (D.-Pa.) which requires EPA to obtain and publish the Secretary's views before taking major pesticides actions in the future.

CRITICAL FACTOR IN THE committee decision was Rep. W.R. Poage's (D.-Tex.) support for the Vigorito compromise, which was adopted by a close 23-18 vote. Poage, a cosponsor of the veto measure, said the original plan faced virtually certain defeat on the House floor and that it would be better to get "part of something than all of nothing." Final committee action on the one-year extension of the Federal Insecticide, Fungicide and Rodenticide Act, H.R.8841, was expected last Friday.

* * *

SIGNIFICANT DETERIORATION RULES under consideration in Senate and House subcommittees would, if adopted, mandate "eternal poverty" in undeveloped states, according to U.S. Chamber of Commerce, which is distributing maps to businessmen and government officials showing the impact of EPA regulations proposed earlier. "What is involved are proposals to amend the law that fail to reflect social, employment, economic, energy and environmental impacts," USCC said. See story page 352.

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NATIONAL COMMISSION ON WATER Quality has completed a draft of the first four chapters of its long-awaited report on the implementation of the Federal Water Pollution Control Act and will be making copies available this week. Chapters include technology assessment, economic impacts, regional assessments and environmental impacts; A/WPR will carry details next issue. Meanwhile, contractor reports continue to flow into NCWQ headquarters. See page 356.

ARMED WITH NCWQ DRAFT, plus EPA recommendations to the Office of Management and Budget (A/WPR, Aug. 25, 1975, p. 333), the House Public Works Committee has scheduled a series of hearings on FWPCA amendments beginning Sept. 23.

* * *

HOUSE UNIT ACTS ON FLUOROCARBONS, NONDEGRADATION

Picking up where it left off before the August recess, the House Commerce Subcommittee on Public Health and Environment last week quickly approved a Clean Air Act amendment to protect the earth's ozone shield from fluorocarbon emissions and moved on to the equally controversial nondegradation issue. Section 107 basically follows the agreement on ozone protection worked out with the House Science Subcommittee on Environment and Atmosphere to provide for a comprehensive Federal research program and authorize Environmental Protection Agency to promulgate fluorocarbon restrictions subject to Congressional veto (A/WPR, July 28, 1975, p. 292). The precise details of EPA rulemaking procedures are still to be worked out.

Section 108 of the subcommittee's June 16 staff discussion draft essentially confirmed EPA's authority to promulgate regulations to prevent significant deterioration of air quality in areas already cleaner than Federal standards require. Last week, the subcommittee voted to substitute its own regulatory scheme, drafted along lines proposed by Rep. Andrew Maguire (D.-N.J.) and revised by amendments proposed by Rep. John Heinz (R.-Pa.) and Chairman Paul Rogers (D.-Fla.). As approved, the amendment requires that each implementation plan contain an area classification plan based on maximum allowable increases in ambient concentrations of, and maximum allowable levels of ambient concentrations of sulfur oxides and particulates.

In Class I areas, the maximum allowable increase in the concentration of sulfur oxides for each period of exposure could not exceed 2% of the concentration permitted for each such period under the secondary ambient air quality standard. Increases in particulate concentrations could not exceed 10% of the secondary standard for each exposure period. In Class II and III areas, the maximum allowable increase in the concentration of both sulfur oxides and particulates could not exceed 25% and 50%, respectively, of the secondary standard for each exposure period. Finally, the maximum allowable concentration of either pollutant could not exceed 75% of the secondary standard for each exposure period.

Under the approved amendment, all units of the national wilderness preservation system, national or international parks, national wildlife refuges, national monuments and national preserves must be designated Class I if more than 1,000 acres. All wild and scenic rivers, national lakeshores or seashores, and national forests must be designated Class I or II if more than 1,000 acres. Other areas may be designated Class III if that designation is specifically approved by state law and legislation enacted by general purpose units of local government representing a majority of the residents in the area, and if that designation will not cause or contribute to concentrations of any air pollutant which exceed any maximum allowable increase level or maximum allowable concentration permitted under the classification of any other area.

Section 108 also requires that major stationary sources obtain a permit prior to construction and spells out the conditions under which that permit must be approved. The amendment provides that, for air pollutants other than sulfur oxides and particulates, an area classification plan need not be required if the implementation plan contains other provisions which EPA finds will accomplish the same purpose as effectively. Nondegradation plan revisions must be submitted within six months after enactment for sulfur oxides and particulates, 18 months for other pollutants. EPA has four months to approve or disapprove the revisions; if the revisions are disapproved, EPA has two more months in which to propose its own regulations, then 90 days to promulgate them.

* * *

INTERNATIONAL OZONE INSTITUTE will conduct a "mini-workshop" on analytical aspects of ozone and odor control with ozone on Oct. 4, just before the Water Pollution Control Federation's annual meeting, in Miami Beach, Fla. Preregistration fee is $35 for members, $40 for nonmembers, before Sept. 26. Contact IOI at its new address in Skytop Complex, Syracuse University, Merrill Lane, Syracuse, N.Y. 13210, or Dr. Rip G. Rice, Technical Advisor, Suite 578, 1629 K St., N.W., Washington, D.C. 20006, (202) 296-8378.

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UTILITIES URGE ERDA EMPHASIS ON EMISSION CONTROL

While most of the testimony offered during Council on Environmental Quality's first round of public hearings on the environmental and energy conservation aspects of Federal energy research policy last week concentrated on the wisdom of Energy Research and Development Administration priorities (A/WPR, Sept. 1, 1975, p. 346), spokesmen for the nation's electric utilities took the opportunity to urge that ERDA concentrate more of its resources to air pollution problems associated with the generation of electricity. "It makes little sense," Edison Electric Institute's G.E. Watkins told the CEQ panel, "for one agency of government to place environmental restrictions on the use of a certain type of fuel without the government adopting policies which encourage the development of technology to eliminate the alleged environmental deficiencies of that fuel."

According to Watkins, "some of our air pollution problems cannot be resolved with present technology. Government should actively support essential research and development of pollution control technology," he said, suggesting that "a key element of that policy should be that environmental goals and standards reflect not only the state of abatement and control technology at the time of the application, but that the standards have a defensible factual basis." To accomplish that goal, National Rural Electric Cooperative Association's Joseph S. Ives urged that ERDA devote enough money to resolve contradictory opinions as to the health effects of power plant emissions and develop sound criteria for determining emission control system reliability.

Ives said NRECA is "very concerned about the health effects of emissions from power generating stations, as well as the tremendous costs that our consumer-owners must bear in reducing these emissions. Recent estimates indicate that the cost of installing sulfur dioxide scrubbers on rural electric generating plants will probably reach one-half billion dollars during the next five years," he said, "and the annualized capital and operating costs will require about $200-million per year in additional revenue." In view of these costs, Ives said he has examined much of the health effects research data and found that while "some health effects data indicts SO_2 emissions as a source of ill-health, there is a sizable body of data which does not support this position."

This discrepancy, Ives said, makes it "very difficult to justify the expenditure of a half-billion dollars of our consumer-owners' money to solve a health problem which may be based on controversial scientific evidence. On this basis," he said, "NRECA urges that the ERDA devote enough money to the study of emission health effects so that this important problem is resolved."

Questions Reliability of FGD Systems

Ives also said NRECA is extremely concerned about the reliability of flue gas desulfurization systems and the confusion which exists over the terminology that is used in describing their reliability. "At this time," he said, "it is practically impossible to compare the performance of FGD systems due to the use of inconsistent and confusing engineering terms in many of the technical papers and news releases... The concept of 'availability' has little meaning unless a test procedure is established to verify and demonstrate the 'level of confidence' that a unit will actually operate over a specified period of time under specified conditions," Ives said. "In our opinion, ERDA should establish a glossary of reliability engineering terminology and develop a set of standard test procedures to demonstrate the reliability of components used in power generating stations.

"The reliability of environmental control equipment has been seriously questioned by the electric utility industry," Ives said, "and has been a major obstacle to its widespread adoption... If this equipment is unreliable, not only will the regional and national power supply be threatened, but the impact of not meeting the national ambient air quality standards could adversely affect the national health. The reliability of environmental equipment must be established," he said, "and a level of confidence that it will really perform where operating must be verified. Until these questions are adequately answered, the electric utilities will and should object to the widespread use of unreliable environmental control systems."

Ives went on to note that the reliability and level of confidence of environmental control equipment is only the first step in protecting the reliability of the national power supply system. "The introduction of environmental control equipment into one section of a power generating plant can cause problems in other sections of the power plant," he said. "For example, if a sulfur dioxide scrubber is placed between the fire box and stack, emissions from the scrubber may cause corrosion in the reheater section and the stack. If this corrosion is severe, the power plant may have to shut down to replace the reheater or the stack liner.

"Until a complete system reliability testing program is initiated for various types of fuel, used under various operating conditions," Ives warned, "there can be little level of confidence that the power plant will meet its availability and reliability predictions."

Although environmentalists testifying at the CEQ hearings chose to concentrate on the energy mix outlined in ERDA's "National Plan for Energy Research, Development and Demonstration" (A/WPR,

(Continued on following page)

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CEQ HEARINGS ON ENERGY RESEARCH POLICY (Cont.)

July 7, 1975, p. 264), rather than address the points raised by the utilities, National Wildlife Federation's Thomas L. Kimball seemed to express an environmentalist's "answer" to the implication that environmental considerations must be balanced against the need for energy. "We would reverse the priorities," Kimball said. "It is against the need to maintain a livable environment that such things as energy production and use must be balanced. The cost and inconvenience of a slight energy shortfall now are minor compared to what the real environmental cost could be, now and in future generations, to make up that shortfall."

While other witnesses testifying before CEQ also brought up the issue of air and water pollution control, notably spokesmen for the paper and fertilizer industries, the emphasis was clearly on much broader environmental issues – particularly the relative merits of concentrating nuclear power and other high technology approaches as opposed to conservation efforts and increased utilization of solar, geothermal and hydroelectric energy. Additional hearings are scheduled for Los Angeles on Sept. 8 and 9 and Detroit on Sept. 11 and 12, with CEQ's first major report scheduled for publication next summer.

* * *

AIRPUMP CALLED CULPRIT IN AUTO SULFUR EMISSIONS

If the pattern emerging from ongoing Environmental Protection Agency tests is confirmed, "it appears that there may be little or no difference in the emissions of sulfuric acid from noncatalyst and from non-airpump catalyst cars," EPA Administrator Russell E. Train told Sen. James L. Buckley (R.-N.Y.) late last month. In an Aug. 28 letter to Buckley, ranking minority member of the Senate Public Works Subcommittee on Environmental Pollution, Train said current tests show that noncatalyst cars put out slightly more sulfuric acid than previously estimated, that non-airpump catalyst cars put out significantly less than estimated, and that the airpump-equipped catalyst cars emit sulfuric acid in the range of earlier estimates.

Train emphasized, however, that these conclusions are still tentative, so the "caution that caused me to make my decision and suggestions last March 5 appears still to be warranted as regards the timing of emission standards more stringent than the current Federal interim levels" (A/WPR, March 10, 1975, p. 91). At that time, Train said he could not recommend more stringent standards until the agency established the appropriate limits on sulfuric acid emissions or concluded that they pose no danger to public health.

Those efforts have so far been frustrated by an "inability to develop a test procedure by which the sulfuric acid emissions measured from an individual car over a series of repeated tests are about the same," Train said, noting that "it is not yet clear whether the test-to-test variability experienced is due to the test procedure or to erratic behavior of the vehicles themselves."

According to Train, the airpump utilization issue may also affect the level of nitrogen oxides emissions for 1977 and subsequent model years. "As you know," he said, "1977 model year cars, which will soon begin their certification testing, will have to meet a 2.0 gpm NO_x standard, compared to the current 3.1 gpm standard. It is the view of our engineers," he said, "that through the use of the best available exhaust gas recirculation technology, it should be possible for the auto industry to meet a 2.0 gpm NO_x standard in 1977, while concurrently meeting the 1.5 gpm hydrocarbon and 15 gpm carbon monoxide standard, without adding airpumps.

"However," Train continued, "as noted in my suspension decision, we cannot provide assurance that the industry will in fact avoid the use of airpumps in the 1977 model. year. Nor can we yet demonstrate that non-airpump catalyst cars calibrated to meet 1.5 HC, 15 CO and 2.0 NO_x will continue to emit sulfuric acid at about the same low levels as appear to apply to non-airpump catalyst cars calibrated to meet the 1975-76 standards. We expect to obtain and test cars so designed and calibrated as part of our program to develop a sulfuric acid emission standard," Train said, "and should be able to provide at least a preliminary answer to this question within six weeks."

* * *

CHRYSLER PAYS CALIFORNIA FINE UNDER PROTEST

Chrysler Corp. has paid the $328,200 fine levied against it by the California Air Resources Board for violation of the state's stringent auto emission control standards, ARB Chairman Tom Quinn said last week (A/WPR, Aug. 25, 1975, p. 338). But it did so under protest, he said, and may go to court in the next few months to obtain at least a partial refund.

In another state-industry confrontation, Minnesota officials said last week that three independent studies have shown Reserve Mining Co. plans to contain taconite tailings at Milepost 7 to be "basically sound." The consultants – W.A. Wahler Associates, Michael Baker, Jr., Inc., and Casagrande Consultants – said more specific design data are needed and recommended that the state conduct more extensive geologic investigations of the proposed disposal site.

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EPA OFFERS LIMITED PCB CONTROL GUIDANCE

Faced with growing evidence that levels of polychlorinated biphenyls which represent serious health hazards are being detected with increasing frequency in fish and wildlife, and mounting pressure to do something about the problem, Environmental Protection Agency has greatly accelerated its PCB research efforts and is preparing to promulgate a water quality criteria level of one part per trillion for PCBs. "EPA considers that a PCB concentration of 1 ppt in the ambient water environment represents an appropriate goal for the nation," EPA's toxic substances chief Glenn E. Schweitzer told Wisconsin's Department of Natural Resources last weekend. "We would suggest that this goal serve as very broad guidance in developing strategies on a nationwide basis and locally to control dischargers of PCBs into our waterways."

But Schweitzer said EPA is "not prepared at this time to provide more specific guidance on the control strategies that should be adopted nationally or locally concerning the regulation of individual dischargers. We are developing a nationwide strategy with a significant component of our approach to be reflected in a toxic effluent standard for PCBs scheduled for proposal early next year," Schweitzer said. "At the same time, we recognize that a nationwide standard might not be adequate in addressing local problems in some areas, and the control strategies adopted locally may of necessity require an elaboration of the national approach.

"In any event," Schweitzer said, "we believe that better information is needed concerning the specific facilities discharging into the aquatic environment before reaching a final judgment on a national standard. Also," he continued, "it is important to clarify the portion of the PCB contamination problem which can be attributed to specific dischargers and the practical feasibility of reducing the discharges." Noting that EPA last month requested detailed information from 84 companies concerning their activities involving PCBs, Schweitzer said "with this information, we believe we will be in a much better position to develop meaningful regulatory approaches which take into account the realities of current industrial activities."

According to Schweitzer, EPA and other Federal agencies will sponsor a national symposium in Chicago this fall to further clarify selected aspects of the PCB problem. Meantime, however, the agency is under growing pressure to take immediate action against General Electric Co. and other facilities now discharging PCBs into the Hudson River. Officials of U.S. Department of Health, Education and Welfare and New York's Department of Environmental Conservation have urged EPA to reconsider GE's discharge permit, while Natural Resources Defense Council and the Hudson River Fishermen's Association are demanding (1) immediate litigation by EPA to compel dischargers to undertake major abatement efforts in the next few months, (2) an announcement by EPA that it will soon begin to enforce a no-discharge policy for PCBs, and (3) a moratorium on dredging activities on the Hudson to avoid stirring up PCBs concentrated in river bottom sediments.

* * *

TRAIN OPPOSES CZM BILL, CITES BUDGET CONSTRAINTS

While Environmental Protection Agency concurs in the need for development of Outer Continental Shelf resources with careful attention to social, economic and environmental considerations, EPA Administrator Russell E. Train said last week, the Administration cannot support pending coastal zone management amendments at this time because of budgetary constraints. Train told the House Merchant Marine and Fisheries Subcommittee on Oceanography Sept. 3 that the President's decision to limit new Federal spending programs preclude endorsement of the large new grant programs which Chairman John M. Murphy's (D.-N.Y.) H.R.3981 would authorize, as well as the increase in the appropriation authorizations under the existing Coastal Zone Management Act.

Pointing out that EPA and other Federal agencies "are not without legislative authority or experience in dealing with the problems created by OCS oil and gas development," Train said budgetary restrictions "necessitate that we use the authorities available under Federal law to the maximum extent possible to regulate the varying uses of natural resources on the OCS as well as rely on program efforts which can be implemented administratively, under existing law."

Under H.R.3981, Department of Commerce would provide 100% annual grants to coastal states for planning and control of adverse economic, environmental and social impacts due to facility siting or energy development and production, with $200-million authorized annually. H.R.3981 also provides up to 90% grants to coastal states to further interstate coordination of coastal zone planning, with a $5-million annual authorization, and 66-2/3% grants to coastal states for short-term research and training assistance, also authorized at $5-million per year.

Other provisions of H.R.3981 require that OCS licensees conform to state CZM plans, extend the scope of CZMA to include beaches and islands, extend and increase authorizations under the act through fiscal 1980, amend current certification procedures to apply to "leasing" operations, as well as permitting and licensing activities, and require DOC reports to address economic, social and environmental impacts of facility siting and energy development.

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NCWQ TOLD OF SMALL COMMUNITY PROBLEMS WITH FWPCA

Small municipalities, those with populations of under 100,000, are experiencing the greatest number of problems in implementing provisions of the Federal Water Pollution Control Act, Victoria Price and David K. Hartley, government affairs consultants, have reported to National Commission on Water Quality in "Problems of Municipal Doers in Implementing P.L. 92-500." Despite the greater incidence of problems among small communities, draft report notes that larger communities in general voice a more consistently negative attitude about substantive requirements of the law, although they are often less concerned about administrative burdens, poor relations with EPA and relationship between funding and time delays.

Financial problems occur most frequently in small communities except where local support for the program is high, report says. It concludes that: inflationary impact is most severe in those communities having long delays in commencement of plant construction; construction cost problems are most prevalent in communities low on the priority list; legal problems associated with local fund raising and cash flow occur randomly; and impact of nonindustrial operating and maintenance cost increases are highest in slow growth municipalities, with operating and maintenance fund-raising problems highly correlated with low citizen support for projects.

Institutional problems also arise most frequently in small communities, report notes, with such cities displaying inability to perform Section 201 planning. Larger cities do evidence greater problems with aspects of industrial pollution control, it adds.

In interviews in eight states with state and local governments, EPA, industry officials, consulting engineers, and environmentalists, a generally favorable attitude toward FWPCA is found, according to Oregon Research Institute. "Attitudes of Selected Groups Toward Implementation of Public Law 92-500, the Federal Water Pollution Control Act Amendments of 1972," submitted to NCWQ by ORI, says that favorable attitude toward the law was indicated by 94% of EPA employes interviewed; 79% of environmentalists; 63% of consulting engineers and state water pollution agency officials; 62% of local officials; 56% of state legislators; and 53% of industry officials.

Greatest disagreement between Federal and state officials in regard to implementation of the law centers on planning, with EPA wanting planning to occur at the local level while state officials prefer to retain their present planning responsibilities, ORI points out. State officials contend that changing objectives, requirements and guidelines have resulted in conflicting directives from EPA "which make the implementation of the act difficult," while Federal officials say that most problems revolve around a general reluctance toward administrative changes and an unwillingness on the part of dischargers to comply with new standards.

Outlook for Meeting 1977 Goals Mixed

Slight majority of both state and EPA officials believes the chances are better than even that industry will meet the 1977 goals but that most localities will not. Consultants, industry and local officials, however, are not optimistic that the 1977 requirements will be achieved, primarily because of money problems. EPA officials generally support the 1977 goals of the act but a majority of state agency, local and industry officials and consultants does not.

Among local and industry representatives and consultants, 90% are satisfied with the permit program although a majority would like to see a softening of restrictions on a case-by-case basis. Majority of the three groups also feels the Federal monitoring and reporting requirements are effective; prefers sanctions for pollution violations; favors tax breaks for industry; and favors user charges at public facilities. Majority of local officials and consultants also favors effluent charges, but two-thirds of industry representatives oppose such charges. Environmentalists expressed the opinion that their interests are not given great weight by state agencies, contending that the interest of polluters is more likely to prevail than the interests of the environment.

Lost production in the domestic steel industry resulting from fewer exports due to wastewater discharge standards under FWPCA will amount to more than 5% in 1985, concludes a draft report, "The Effects of Effluent Discharge Limitations on Foreign Trade in Selected Industries," prepared by Public Research Institute for NCWQ. Among five industries studied – steel, pulp and paper, textile, tanned leather and red meat – steel would feel the greatest impact on foreign trade as a result of FWPCA standards, PRI says, noting that cost increases will reach an estimated 10% in 1985 and by that year resultant import penetration will have increased by about 30%.

Pulp and paper exports will be only moderately affected by the wastewater standards, PRI says. Costs will rise by as much as 5% by 1985, it notes, with pulp production down by as much as 1.5%, newsprint down 3%, paperboard down 6%, and other paper less than 1% lower due to foreign trade effects. The other industries will be only lightly impacted, PRI notes. Apparel prices will increase by less than 1%, with resultant encouragement of imports minor; tanned leather prices will rise as much as 2.6% by 1985, affecting shoe imports by no more than 1%. In pork and beef feeding and slaughtering industry, PRI foresees cost effects of less than 1%, with imports increasing about 1.6% in the year of greatest impact.

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DU PONT REVIEWS NBS FLUOROCARBON/OZONE FINDINGS

Far from providing new evidence to support the theory that fluorocarbons pose a serious threat to the earth's protective ozone shield, a recently publicized National Bureau of Standards study raises new questions about the completeness of the computer model used to predict ozone depletion, according to E.I. du Pont De Nemours & Co. Du Pont acknowledged that the study by Pierre J. Ausloos and Richard E. Rebbert of NBS provides more detailed information about the way various ultraviolet wavelengths act on fluorocarbons to produce chlorine atoms and said the study is a valuable contribution to information needed to provide a greater understanding of the fluorocarbon/ozone issue (A/WPR, Sept. 1, 1975, p. 344).

But the fact that such reactions occur has been accepted by scientists for some time, Du Pont said, and thus is not "new" information that supports the theory. What is new in the Ausloos study is its discovery of the role temperature plays in the breakdown of fluorocarbons by ultraviolet light, Du Pont said. Their finding that the breakdown of fluorocarbons at the low temperatures normally occurring in the upper atmosphere is much slower than previously believed is not included in the current computer models of the stratosphere, Du Pont said, and indicates a need to recheck earlier reports that studies of fluorocarbon breakdown in the upper atmosphere seem to match the computer model.

Du Pont's J.P. Jesson put it this way: "The most significant aspect of the new work is to point out quantitatively for the first time a factor which has been neglected in current models of the stratosphere. This is the temperature dependence of fluorocarbon breakdown by ultraviolet light. The effect could alter calculated vertical distributions of fluorocarbons. One must therefore view with some caution statements that current model calculations accurately reproduce fluorocarbon concentrations as a function of altitude.

"Dr. Ausloos and his co-workers have also investigated the nature of the primary ultraviolet breakdown process," Jesson said. "This is an important fundamental contribution, but it does not alter significantly the general status of the fluorocarbon/ozone issue. Previous, less direct work on this process has been accepted by workers in the area for some time." Du Pont points out that the National Academy of Sciences, in its recent interim report on research needs (A/WPR, Aug. 11, 1975, p. 313), notes that "the photolysis parameters for [fluorocarbons] seem to be fairly well resolved, both as to absorption, cross section and quantum yield..."

* * *

AUTO MAKERS URGE PUBLIC 'CHOICE' ON EMISSIONS

"You'll be paying the bill, so let Congress know your choice!"

That was the headline Detroit auto manufacturers displayed in every daily newspaper in the country last week in an advertisement urging the public to make its feelings on auto emission standards known to their Senators and Representatives (A/WPR, Sept. 1, 1975, p. 341). "Congress is about to make an important decision that could affect the cost and gas mileage of your car for years to come," the ad says. "Since you will be paying the bill, we thought you should be aware of two major alternatives being considered by Congress right now. They concern the control of emissions from cars. Should the standards governing automotive emissions be made even stricter than they are today? Or are they strict enough now? Take your choice."

As a matter of fact, neither of the choices presented by the auto manufacturers -- American Motors, Chrysler, Ford and General Motors -- are under serious consideration in Congress. Both the Senate Public Works Subcommittee on Environmental Pollution and the House Commerce Subcommittee on Public Health and Environment have made tentative decisions on auto emission standards which fall between the auto makers' Choice 1 -- the President's proposal to extend current standards for five years -- and Choice 2 -- no change in existing law requiring progressively more stringent standards.

"The President and his Administration have evaluated the pros and cons of current law governing emissions and recommended that the standards for today's cars be extended for five years," the ad says. As a result, "there will be continued improvement of air quality as new cars replace old cars" and manufacturers "can meet their individual commitments to the President and improve industrywide gas mileage between 1974 and 1980 by at least 40%." The auto makers point out that, compared to precontrolled cars today's standards result in reductions of over 80% for hydrocarbons and for carbon monoxide and about 40% for oxides of nitrogen according to industry data.

On the other hand, the ad says, "present Federal law calls for even stricter emissions standards for 1977-78 model cars than those required today. Some members of Congress favor these stricter standards." According to the auto makers, "stricter standards would add only marginal improvement to air quality," except for California which has a "special air quality problem and has its own special standards." Moreover, the ad continues, "to our knowledge, no auto manufacturer yet knows how to meet the 1978 standards on a mass production basis. Current 'best effort' experimental systems, however, indicate... your gas mileage could be reduced by 5% to as much as 30% [and] the cost of your car could increase by an estimated $150 to $400..."

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MORE RATIONAL BASIS FOR STANDARDS NEEDED, SOCMA TOLD

Increasing capability of the analytical chemist to detect very minute concentrations of potentially harmful materials in the environment makes it ever more important for the nation's lawmakers to find a rational basis for legislation establishing pollution control standards, according to University of Florida's Herbert A. Laitinen. Speaking before the Synthetic Organic Chemical Manufacturers Association in New York City last week, where he was cited by SOCMA for his work in environmental chemistry, Laitinen *pointed to the recent* publicity given the analysis of Mississippi River water at New Orleans, in which hundreds of organic compounds were discovered in minute concentrations, as an example.

"All of this sounds pretty alarming," Laitinen said, "at least until we consider the analytical results quantitatively. In the case of chloroform, this was for a long time a time-honored component of certain cough medicines. Someone calculated that to ingest an amount of chloroform equal to that contained in a teaspoon of cough syrup would require drinking something like 250 gallons of water," he said. "It is inevitable that there will be an increasing number of such situations being encountered, not because of any deterioration in environmental quality or food products, but simply because of our increasing capability of detecting minute traces."

According to Laitinen, "the question is: do we blame the analytical chemist for finding these impurities, the people who put them there, or the people who wrote the laws in such an absolute form that they inevitably must be violated? This is not an easy question that has a universal answer," he said. "For example, we do not really know whether there is a threshold level of carcinogen below which cancer will never be caused, although intuitively, as chemists, we feel that nature must have ways of coping with at least a few molecules or else cancer would be much more prevalent than it actually is. In the case of 'ordinary' poisons, we do know that there is always a threshold limit.

"Therefore," Laitinen said, "rational legislation on pollution standards should be based not on the sensitivity of available analytical methods, but in relation to a natural background where that exists or, as in the case of synthetic chemicals not found in nature, a threshold level below which no damage occurs. Without such a rational basis for legislation," he said, "we will inevitably be playing the sensitivity game to no useful purpose."

* * *

CATALYTIC PROCESSES EXPLORED AT ACS MEETING

Japanese scientists working on a process to desulfurize power plant stack gases have found that activated carbon soaked in ammonium bromide and dried in air can remove 80% of the nitrogen oxides in stack gases at 100°C and 97% at 130°C. Scientists from the Hitachi, Ltd., Central Research Laboratory in Tokyo told American Chemical Society's annual meeting in Chicago that the simple NO_x catalyst can use commercially available carbons and the required amount of ammonium bromide is only 1% to 5% by weight of the carbon. The scientists -- Michiharu Seki, Yo Sakurai and Kazeutsu Yoshida -- say a pilot program is planned to develop the catalyst.

In another paper on catalyst technology presented in Chicago, Bell Laboratories scientists warned that removal of sulfur from gasoline to reduce emissions of sulfuric acid mist from cars equipped with platinum catalysts could result in release of hydrogen cyanide. According to Bell's R.J.H. Voorhoeve, J.P. Remeika and L.E. Trimble, HCN can be formed in small amounts when platinum catalysts are used under reducing conditions necessary for the proposed dual catalysts to control NO_x emissions. The quantities produced are insignificant in the presence of sulfur, but could increase to dangerous levels if sulfur is removed from gasoline.

Meanwhile, Environmental Protection Agency continues to experience delays in its efforts to develop a standard for sulfuric acid emissions from automobiles. A recent status report on that effort says the standard may be promulgated by mid-February, rather than November as previously estimated, and some EPA officials believe March is a more realistic target. Still seeking to have a standard ready for 1979 model year cars, EPA will be changing its research strategy toward identifying the cause of and finding corrective measures for the variability of test data.

In other auto-related developments, California Institute of Technology's Jet Propulsion Laboratory reported last week that a $1-billion development program over the next seven years could insure widespread use of a pollution-free automobile engine by the mid-1980s. In a study commissioned by the Ford Motor Co., Cal Tech specialists selected the Brayton gas turbine engine and the Stirling continuous external combustion engine as the best of nine alternatives studied in terms of low emissions and fuel economy at the lowest cost. In Tokyo, Honda Motor Co. has unveiled the low-NO_x 1976 model CVCC engine which it is marketing in Japan some 18 months before Japanese law requires. The new engines will be marketed in this country by early next year, but with modifications to increase fuel economy which will result in higher NO_x emissions. Honda said the new CVCC engine will emit no more than 0.94 grams per mile of NO_x and that the laboratory tests show emissions between 0.32 and 0.38 gpm are possible.

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POLLUTION CONTROL INDUSTRY NEWS

Peabody Gallon Corp., New York City, reports that its Peabody Engineered Systems unit has been awarded a contract by Alabama Electric Cooperative, Inc., Andaleusia, Ala., for a $20-million limestone slurry flue gas desulfurization system for the utility's coal-fired Jackson, Ala., power station. First half of the system will be completed by early spring 1978, second half by spring 1979. Consulting engineer for the project is Burns & McDonnell Engineering Co., Kansas City, Mo... Peabody has also announced the acquisition of Floway Pumps, Inc., Fresno, Calif., for Peabody stock valued at between $3- and $5-million.

Envirotech Corp., Menlo Park, Calif., reports that its Erco Envirotech Ltd. affiliate in Salt Lake City, Utah, will produce the new closed-cycle system for kraft pulp mills which Great Lakes Paper Co. announced it is installing at its new 250,000-ton-per-year plant at Thunder Bay, Ont. Environment Canada recently signed a $1.158-million contract with Great Lakes to demonstrate the recycling system, which is expected to cost about $8-million. The Thunder Bay plant is expected to open in mid-1976.

American Air Filter Co., Inc., Louisville, Ky., reports that its AAF-Ltd. subsidiary in Cramlington, England, has received a $4-plus-million order from British Steel Corp. for a 24-compartment AMER-therm fabric collector, ductwork and air handling equipment for four electric arc furnaces at British Steel's Stocksbridge Works in Sheffield, England.

Combustion Engineering, Inc., Windsor, Conn., reports its Power Systems Group has received an order valued at more than $3-million from Louisville Gas & Electric Co. for a carbide lime flue gas desulfurization system at the utility's Cane Run Unit No. 5. Operation is scheduled to begin in January 1977.

Rexnord, Inc., Milwaukee, Wis., has reported net income for the third quarter ended July 31 of $6.7-million or $1.08 per share on sales of $139.2-million, compared to $4.5-million or 71¢ per share on sales of $124.9-million a year ago. For the nine-month period, earnings were $19.4-million or $3.15 per share on sales of $414.9-million, compared to $12.4-million or $1.93 per share on sales of $362.8-million last year. Firm expects to end the fiscal year with a $300-million backlog.

Dow Chemical Co., Midland, Mich., will finance the acquisition, construction and installation of air and water pollution control facilities at its Plaquemine, La., plant through $27-million in pollution control revenue bonds to be issued by Industrial District No. 3 of the Parish of West Baton Rouge. Offering will consist of $7-million principal amount of term bonds due Oct. 1, 1985, and $20-million principal amount of term bonds due Oct. 1, 2005, and will be made through an underwriting group headed by Smith, Barney & Co., Inc.

Electric Power Research Institute, Palo Alto, Calif., has awarded Illinois Natural History Survey a $523,000 research contract to assess the environmental effects of a power plant on a lake fishery and develop an optimum management strategy so that lakes can be utilized for power plant cooling and recreational purposes. Two lakes in central Illinois, one of which is used for power plant cooling, will be compared in the three-year study.

FOR THE RECORD

Approval of Alabama air quality implementation plan revisions. Environmental Protection Agency. Aug. 28 Federal Register p. 39503.

Proposed control of erection of structures in navigable waters in Gulf of Mexico. U.S. Army Corps of Engineers. Aug. 28 FR 39524.

Promulgation of final amendments to Boston transportation control plan. EPA. Aug. 29 FR 39863.

Correction to Puerto Rico implementation plan approval. EPA. Aug. 29 FR 39863.

Notice of closing date for receipt of environmental education grant applications. Department of Health, Education and Welfare. Aug. 29 FR 39918.

Notice of Sept. 29 meeting of Citizens Advisory Committee on Environmental Quality. Aug. 29 FR 39921.

Final notice of public hearings on environmental aspects of Federal energy program. Council on Environmental Quality. Aug. 29 FR 39926.

New source performance standards for sulfuric acid plants, response to remand. EPA. Aug. 29 FR 39927.

Regulation of fuels and additives, liabilities and penalties. EPA. Aug. 29 FR 39962.

Promulgation of sulfur dioxide compliance schedule for Kentucky air implementation plan. EPA. Sept. 2 FR 40159.

Correction to regulations on maintenance of national ambient air quality standards. EPA. Sept. 2 FR 40160.

Notice of public hearing on proposed revision to Iowa air implementation plan. EPA. Sept. 2 FR 40172.

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PEOPLE IN THE NEWS

William Simmons, California Air Resources Board Executive Officer, will become director of San Diego County's Department of Air Pollution Control effective Sept. 10.

John B. Kraeling has been named manager-engineering and **Robert E. Saadi** special projects coordinator for the Water and Waste Water Treatment Division of Zurn Industries, Inc., Erie, Pa.

Thomas D. Wells has been promoted to technical director for the Water Services Division of UOP, Inc., Des Plaines, Ill.

Peter R. Payne has been appointed director-environmental programs for American Can Co., Greenwich, Conn.

Robert S. Schiffman has been named vice president-marketing for Tenney Engineering, Inc., Union, N.J.

Donald J. Sengstaken, W. Charles Wyatt and **Hans M. Eweldsen** have been elected principals of Woodward-Clyde Consultants. **Arthur W. Kurteff, James D. Sartor, Robert D. Plunkett, David M. Conners, K.T. Mao** and **Iraj Noorany** have been named associates.

Raymond E. Davis, Jr., and **James C. Wilson** have been elected vice presidents of sales and engineering, respectively, of Environmental Control Products, Inc., Charlotte, N.C. **Richard E. Kelly** was elected secretary and assistant treasurer of the corporation.

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EPA WASTEWATER TREATMENT GRANTS

EPA regional administrators have awarded 38 construction grants totaling $22,914,196 to help finance waste treatment facilities.

		Grant	Project
AS:	Skagway	$ 71,280	Plant design
CA:	Corning	13,125	Plant planning
FL:	Ft. Pierce	220,736	Plant planning
	Lee County	193,282	Plant planning
	Pasco County	246,314	Plant planning
	Sanford	93,735	Plant planning
GA:	Augusta	346,355	Plant planning
	Fulton County	2,714,575	Interceptor
	Ray City	10,620	Plant planning
IL:	Hurst	4,350	Plant planning
IN:	Monon	15,620	Plant planning
	Scottsburg	15,750	Plant planning
	Trafalgar	5,625	Plant planning
KS:	Beloit	19,800	Plant planning
	Carbondale	11,620	Plant planning
	Chetopa	6,000	Plant planning
	Girard	6,750	Plant planning
	Meize	6,958	Plant design
	Narka	133,720	Collector
	St. Paul	5,320	Plant planning
MS:	Gardner	51,375	Plant planning
	Templeton	4,292,299	Sewers
MO:	Alton	3,370	Plant planning
	St. Louis	52,800	Interceptor
	Warrenton	1,028,400	Plant, interceptor
	Washington	461,920	Interceptor
NH:	Hooksett	35,850	Plant planning
NJ:	Bayshore Reg. Sew. Auth.	7,110,600	Plant, interceptor
NC:	Mt. Olive	30,000	Plant planning
	Plymouth	13,500	Plant planning
OH:	Clermont Cty	355,650	Plant design
	Oxford	255,000	Plant planning
OK:	Grady County	183,457	Plant
OR:	Washington Cty	3,314,250	Plant
PA:	Lancaster	718,270	Pl. improvement
	Saltsburg	454,200	Plant, interceptor
SD:	Irene	81,675	Sewer
UT:	Tropic	330,375	Collector

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PUBLICATIONS AVAILABLE

Wastewater Systems Engineering, by Homer W. Parker, is designed to cover virtually every aspect of sewage treatment facility design in handbook format; 432 pgs. Available @ $18.95 from Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632.

Handbook of Environmental Civil Engineering, edited by Robert G. Zilly, provides essential working data and emphasizes new environmental and management aspects of the field, as well as most recent changes in technology; 1,022 pgs. Available @ $37.50 from Van Nostrand Reinhold, Division of Litton Educational Publishing, Inc., Litton Industries, 450 W. 33rd St., New York, N.Y. 10001.

Analytical Instrumentation, Volume 13, prepared by Instrument Society of America, contains proceedings of symposium held last May in Philadelphia, including source and ambient air quality, physical methods, electrochemical and chemical methods, combustible analyzers and water quality; 153 pgs. Available @ $15 ($12-members) from ISA, 400 Stanwix St., Pittsburgh, Pa. 15222.

Fish Processing Operations Liquid Effluent Guidelines, prepared by Environment Canada, presents guidelines and explanatory notes for control of liquid effluents from fish, shellfish and fish meal processing operations. Available as Report EPS 1-WP-75-1 from Environmental Protection Service, Department of the Environment, Ottawa K1A 0H3, Ontario, Canada.

Wastewater Characterization for the Specialty Food Industry, published by Environmental Protection Agency, shows wide variations in wastewater generation among specialty food processing operations. Findings enable operators to compare their wastewater generation with that of similar operations and may aid in the preparation of discharge regulations; 134 pgs. Available as EPA-660/2-74-075 @ $2 from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Eutrophication of Surface Waters--Lake Tahoe's Indian Creek Reservoir, published by Environmental Protection Agency, points out the complex relationship between the natural and treated waters in the reservoir and the resulting effects on the quality and usefulness of the reservoir's water; 188 pgs. Available as EPA-660/3-75 from EPA's Technical Publications Office, National Environmental Research Center, 200 S.W. 35th St., Corvallis, Ore. 97330.

Nutritional Ecology of Nuisance Aquatic Plants, published by Environmental Protection Agency, reports that analyzing plant tissue offers a reliable technique for assessing causes of nuisance vegetation growth in lakes and streams. Plant analysis can be used to evaluate inorganic nutrient concentrations in the environment, corresponding to the levels in the plant tissue, to determine the least amount of a nutrient that will maximize plant yield and growth. Available as Publication No. EPA-660/3-75-027 from Office of Public Affairs, Corvallis Environmental Research Laboratory, 200 S.W. 35th St., Corvallis, Ore. 97330.

Environmental Education: A Guide to Information Sources, published by Gale Research Co., describes sources of materials, information and educational, consultative and financial support for environmental efforts at all educational levels; 225 pgs. Available as ISBN 0-8103-1337-5 @ $18 from Gale Research Co., Book Tower, Detroit, Mich. 48226.

Water Pollution Control Directorate Publications, prepared by Environment Canada, describes technical reports in Environmental Protection Service report series; conference papers, speeches and reprints of papers; and reports published under Canada-Ontario Agreement on Great Lakes Water Quality; 21 pgs. Available from Training and Technology Transfer Division (Water), EPS, EC, Ottawa, Ontario K1A 0H3, Canada.

The Use of Lime in the Treatment of Municipal Wastewaters, published by Environment Canada, reports that addition of lime to pH 11.5 reduced phosphates by 98%, turbidity by 98%, BOD and COD by 74% and 67% respectively, suspended solids by 80% and total coliforms 100%; 127 pgs. Available as Research Report No. 21 from Training and Technology Transfer Division (Water), Environmental Protection Service, EC, Ottawa, Ontario K1A 0H3, Canada.

Evaluation of the Barber-Colman Wetox Process for Sewage Sludge Disposal, published by Environment Canada, reports that process can achieve 80% reduction of suspended solids and 65-82% COD, but at a lower temperature and pressure than the corresponding Zimpro process; 75 pgs. Available as Research Report No. 20 from Training and Technology Transfer Division (Water), EPS, EC, Ottawa, Ontario K1A 0H3, Canada.

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